

4. Navigation equipment

Item No	Item designation	Regulation SOLAS 74 as amended where 'type approval' is required	Applicable regulation SOLAS 74, as amended, and the relevant resolutions and circulars of the IMO ⁽¹⁾	Testing standards ⁽²⁾	Modules for conformity assessment					
					B+ C	B+ D	B+ E	B+F	G	H
A.1/4.1	Magnetic compass	Regulation V/12 (r), Regulation X/3	Regulation V/12 (b), Regulation X/3, IMO Resolution A.382 (X), IMO Resolution A.694 (17)	EN 61162-1, EN 60945, ISO 449, ISO 613, ISO 694, ISO 1069, ISO 2269, ISO 10316		X	X	X	X	
A.1/4.2	Electromagnetic compass	Regulation V/12 (r), Regulation X/3	Regulation V/12 (b), Regulation X/3, IMO Resolution A.694 (17) IMO Resolution A.813 (19)	EN 61162-1 EN 60945 ISO 11606 IEC 60945		X	X	X	X	
A.1/4.3	Gyro compass	Regulation V/12 (r)	Regulation V/12 (d), IMO Resolution A.424(XI) IMO Resolution A.694 (17), IMO Resolution A.813 (19)	EN 61162-1, EN 60945, EN 8728; IEC 61162-1, IEC 60945, ISO 8728		X	X	X	X	
A.1/4.4	Radar equipment	Regulation V/12 (r)	Regulation V/12 (g), Regulation V/12 (u), IMO Resolution A.477 (XII) IMO Resolution A.694 (17) IMO Resolution A.813 (19) IMO Resolution MSC64 (67) Annex 4	EN 60936, EN 60945, EN 61162-1; IEC 60936, IEC 60945, IEC 61162-1		X	X	X	X	

⁽¹⁾ ITU Recommendations cited are those referred to in the international conventions and the relevant resolutions and circulars of the IMO.

⁽²⁾ Where IMO Resolutions are cited, only the testing standards contained in relevant parts of the Annexes to the Resolutions are applicable and exclude the provisions of the Resolutions themselves.

A.1/4.5	Automatic radar plotting aid (ARPA)	Regulation V/12 (r)	Regulation V/12 (j), IMO Resolution A.422 (XI), IMO Resolution A.694 (17), IMO Resolution A.813 (19), IMO Resolution A.823 (19)	EN 60872, EN 60945, EN 61162-1; IEC 60872, IEC 60945, IEC 61162-1		X	X	X	X	
A.1/4.6	Echosounding equipment	Regulation V/12 (r), Regulation X/3	Regulation V/12 (k), Regulation X/3 IMO Resolution A.224 (VII), IMO Resolution A.694 (17), IMO Resolution A.813(19), IMO Resolution MSC.74(69) Annex 4	EN 9875, EN 61162-1 EN 60945; IEC 9875, IEC 61162-1 IEC 60945,		X	X	X	X	
A.1/4.7	Device to indicate speed and distance	Regulation V/12 (r), Regulation X/3	Regulation V/12(1) Regulation X/3, IMO Resolution A.478 (XII), IMO Resolution A.694 (17), IMO Resolution A.813 (19), IMO Resolution A.824 (19)	EN 61023, EN 61162-1, EN 60945; IEC 61023, IEC 61162-1, IEC 60945		X	X	X	X	
A.1/4.8	Rudder angle, rpm, pitch indicator	Regulation V/12 (r)	Regulation V/12 (m), IMO Resolution A.694 (17), IMO Resolution A.813 (19)	EN 60945 IEC 60945		X	X	X	X	
A.1/4.9	Rate-of-turn indicator	Regulation V/12 (r), Regulation X/3	Regulation V/12(n) Regulation X/3, IMO Resolution A.526 (13), IMO Resolution A.694 (17), IMO Resolution A.813 (19)	EN 61162-1 EN 60945; IEC 61162-1, IEC 60945		X	X	X	X	
A.1/4.10	Direction finder	Regulation V/12 (r), Regulation X/3,	Regulation V/12(p), Regulation X/3, IMO Resolution A.529 (13), IMO Resolution A.665 (16), IMO Resolution A.694 (17), IMO Resolution A.813 (19)	EN 60945; IEC 60945		X	X	X	X	

A.1/4.11	Loran-C equipment	Regulation V/12 (r), Regulation X/3	Regulation V/12(p), Regulation X/3, IMO Resolution A.529 (13), IMO Resolution A.694 (17), IMO Resolution A.813 (19), IMO Resolution A.818 (19)	EN 61075, EN 61162-1 EN 60945; IEC 61075, IEC 61162-1 IEC 60945		X	X	X	X	
A.1/4.12	Chayka equipment	Regulation V/12,(r) Regulation X/3	Regulation V/12(p), Regulation X/3, IMO Resolution A.529 (13), IMO Resolution A.694 (17), IMO Resolution A.813 (19), IMO Resolution A.818 (19)	EN 61075, EN 61162-1 EN 60945; IEC 61075, IEC 61162-1 IEC 60945		X	X	X	X	
A.1/4.13	Decca navigator equipment	Regulation V/12 (r), Regulation X/3	Regulation V/12 (p), Regulation X/3, IMO Resolution A.529 (13), IMO Resolution A.694 (17), IMO Resolution A.813 (19), IMO Resolution A.816 (19)	EN 61135, EN 61162-1 EN 60945; IEC 61135, IEC 61162-1 IEC 60945		X	X	X	X	
A.1/4.14	GPS equipment	Regulation V/12 (r), Regulation X/3	Regulation V/12 (p), Regulation X/3, IMO Resolution A.529 (13), IMO Resolution A.694 (17), IMO Resolution A.813 (19), IMO Resolution A.819 (19)	EN 61108-1, EN 61162-1 EN 60945; IEC 61108-1, IEC 61162-1 IEC 60945		X	X	X	X	

A.1/4.15	GLONASS equipment	Regulation V/12 (r), Regulation X/3	Regulation V/12 (p), Regulation X/3, IMO Resolution A.529 (13), IMO Resolution A.694 (17), IMO Resolution A.813 (19), IMO Resolution MSC.53(66)	EN 61108-2, EN 61162-1 EN 60945; IEC 61108-2, IEC 61162-1 IEC 60945		X	X	X	X	
A.1/4.16	Auto-pilot (heading control system)	Regulation V/19	Regulation V/19 IMO Resolution A.342(IX), as amended by IMO Resolution MSC 64(67) Annex 3, IMO Resolution A.694 (17), IMO Resolution A.813 (19)	ISO/TR 11674, EN 61162-1, EN 60945; ISO/TR 11674, IEC 61162-1, IEC 60945		X	X	X	X	
A.1/4.17	Mechanical pilot hoist	Regulation V/17 (b)	Regulation V/17 (b), IMO Resolution A.426 (XI), IMO MSC/Circ.568/Rev.1	IMO Resolution A.667 (16), ISO 799						